Physician do not heal thyself

Survey of personal health practices among medical residents

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ABSTRACT

OBJECTIVE To assess how many residents follow the recommendation that physicians have a personal family physician and where residents seek medical attention when needed.

DESIGN Hand-delivered survey.

SETTING Residency training programs at Queen's University.

PARTICIPANTS Of 215 residents with a central mailbox, 122 responded (response rate 57%).

MAIN OUTCOME MEASURES Health status, usual access to health care, having a personal family physician, and response to two scenarios.

RESULTS More than a third (38%) of residents have a local family physician, yet 25% of those with chronic illnesses and 40% of those who use prescription medications regularly do not. Many rely on colleagues; 41% have received prescriptions from or written prescriptions for their colleagues. Residents with local family physicians are more likely to seek appropriate medical attention for physical problems. Residents do not recognize or seek treatment for mental health problems. Knowledge, time, and accessibility were considered barriers to adequate health care.

CONCLUSION Many residents do not have good access to comprehensive, confidential, and objective medical care. They rely on colleagues, and they ignore mental health problems. Lack of time and access, and attitudes about the importance of having a family physician are important barriers.

RÉSUMÉ

OBJECTIF Évaluer le nombre de résidents qui suivent la recommandation à l'effet que les médecins devraient avoir leur propre médecin de famille et déterminer à qui s'adressent les résidents pour obtenir, au besoin, une attention médicale.

CONCEPTION Un sondage distribué par porteur.

CONTEXTE Les programmes de formation postdoctorale à la Queen's University.

PARTICIPANTS Au nombre des 215 résidents qui ont une boîte aux lettres centrale, 122 ont répondu (taux de réponse de 57%).

PRINCIPALES MESURES DES RÉSULTATS L'état de santé, l'accès habituel aux soins de santé, le fait d'avoir son propre médecin de famille et la réponse à deux scénarios.

RÉSULTATS Plus du tiers des résidents (38%) ont un médecin de famille local et pourtant, 25% de ceux souffrant d'une maladie chronique et 40% de ceux qui utilisent régulièrement des médicaments d'ordonnance n'en ont pas. Plusieurs se fient à leurs collègues; 41% avaient reçu des prescriptions de leurs collèges ou avaient rédigé une ordonnance pour eux. Les résidents ayant leur médecin de famille local sont davantage susceptibles de rechercher une attention médicale appropriée pour leurs problèmes physiques. Les résidents ne reconnaissent pas ou ne cherchent pas à obtenir de traitement pour les problèmes de santé mentale. Les connaissances, le temps et l'accessibilité étaient considérés comme des obstacles à des soins de santé adéquats.

CONCLUSION Plusieurs résidents ne jouissent pas d'un bon accès à des soins médicaux complets, confidentiels et objectifs. Ils se fient à leurs collègues et ignorent les problèmes de santé mentale. Le manque de temps et d'accès l'accès et les attitudes entourant l'importance d'avoir un médecin de famille sont d'importants obstacles.

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Cet article a fait l'objet d'une évaluation externe.
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Residency is a unique period in a physician's life. Residents often have exhausting and unpredictable schedules, suffer from sleep deprivation, cope with financial strains, and battle low self-confidence as they deal with emotionally challenging problems.[1-4] The years of high-intensity work and study often take place in a new city, removed from family and established social and medical supports.

The combination of stress and isolation that residents experience can lead to health and emotional problems.[5,6] Many residents and medical students indicate that medical training has adversely affected their health.[7,8] This finding is compatible with studies that show high-strain jobs are associated with higher rates of a variety of diseases.[9] Physicians are at increased risk of suicide, marital problems, and substance abuse.[10]

The Canadian Medical Association (CMA) recommends that every medical student, resident, and practising physician have a personal family physician for comprehensive care and that physicians should not treat their own illnesses or self-prescribe.[11] The College of Physicians and Surgeons of Ontario (CPSO) states that it is inappropriate for physicians to diagnose themselves or their family members except for minor emergency conditions.[12] The Professional Association of Internes and Residents of Ontario (PAIRO) also recommends that all physicians have their own family physicians.[13]

No Canadian studies have determined how well residents follow recommendations or where they go for medical attention. Studies from the United States indicate that many residents and medical students do not have personal family physicians and more than 50% prescribe medications for themselves.[7,14-16] Studies from the United States and Britain show that these behaviours extend to practising physicians.[17] Kahn and colleagues[18] found that fewer than 50% of physicians have their own family doctors. Most physicians receive care by informally consulting colleagues or by diagnosing and treating themselves.[19]

Stoudemire and Rhoads[20] identified many special considerations for physician-patients that inhibit ill or impaired physicians from seeking and obtaining timely and effective treatment. These include denial of illness, the difficult transition from doctor to patient, self-diagnosis or informal consultations regarding personal symptoms, and finally that physicians are treated differently as patients because they are assumed to have a certain body of knowledge. In addition, medical students report being concerned about academic vulnerability if personal illness is revealed, particularly illnesses associated with social stigma (such as HIV, mental illness, or substance abuse).[21]

Data from the 1994 National Population Health Survey show that adults under the regular care of a family physician are more likely to receive recommended preventive services.[22] Medical doctors with a family physician are three times as likely to visit a physician for health maintenance than those without one.[18]

Residents must have access to objective, comprehensive medical care during their residency not only to protect their health while they are training but also to develop coping patterns that will endure throughout their careers as physicians. In this survey we planned to determine how many residents at Queen's University have personal family physicians, how they respond when faced with physical or mental health problems, and the barriers they face to accessing appropriate health care.

METHODS

The survey was conducted in the residency training programs of the Faculty of Medicine at Queen's University. It was designed to collect information concerning health status, usual access to health care, and response to two hypothetical scenarios. One scenario suggested a physical illness and the second was designed to suggest a depressive illness. The survey was pilot-tested on a small group of residents to ensure it had face validity and could be understood. All residents who had a central mailbox in the Kingston General Hospital or at the Family Medicine Centre were eligible. The Dillman protocol was followed with repeat distributions of the survey at 3 weeks and 8 weeks after the original.[23] Surveys were anonymous, and respondents were permitted to omit identifying demographic data.

Data were analyzed using descriptive statistics and the χ^2 test as appropriate to compare differences between subgroups within the sample population. Statistical significance was determined at the $P < .05$ level. The study was approved by the Queen's University Research Ethics Board and the Associate Dean for Post-graduate Medical Education.

Dr Campbell *was a resident in the Department of Family Medicine at Queen's University in Kingston, Ont, during the study.* **Dr Delva** *is an Associate Professor in the Department of Family Medicine and was* **Dr Campbell's** *advisor.*

RESULTS

There were 244 residents at Queen's University in November 2001. Only 215 of the residents had mailboxes; 122 of these responded, giving a response rate of 57%. Identifying demographic information was incomplete on 8% of the surveys. All responses were included in the analysis except as indicated. Residency programs were grouped as family medicine (including all third-year programs), medicine (internal medicine, pediatrics, and emergency medicine), surgery (general surgery, orthopedic surgery, urology, ophthalmology, obstetrics, and gynecology), psychiatry, and other (radiology, anesthesia, pathology, and physical medicine). More women than men and family medicine residents than other residents responded (**Table 1**). As the "other" residents did not have mailboxes in the distribution locations, there were no responses from this group. Of the respondents, 45% were single and 84% did not have children.

Table 1. Demographic characteristics of residents who responded to the survey compared with those of all residents at Queen's University

CHARACTERISTICS	RESIDENTS WHO RESPONDED TO THE SURVEY (N=122) %	ALL RESIDENTS AT QUEEN'S UNIVERSITY (N=244) %
YEAR OF RESIDENCY		
First year	35	27
Second year	26	26
Third year or more	39	47
PROGRAM		
Family medicine	43	27
Medicine	30	30
Surgery	20	22
Psychiatry	7	6
Other	0	15
SEX		
Male	52	60
Female	48	40

Among the 122 respondents, 13% had chronic medical conditions (defined as any condition requiring regular medical follow up), 37% used prescription medications regularly, 24% had visited a consultant during their residency training, 54% had not missed work due to illness, and 16% had missed only 1 day during their residency. The average number of days of work missed yearly per resident was 0.7.

Table 2 shows which residents had family physicians. No single, male, childless resident had a family physician in Kingston. Residency program and year of residency were not significantly related to having a family physician. Married women with children were most likely to have local family physicians. Residents with chronic medical conditions or need for regular prescription medications were also more likely to have local physicians.

Table 2. Characteristics of residents with and without family physicians

DEMOGRAPHIC CHARACTERISTICS	FAMILY PHYSICIAN IN KINGSTON %	FAMILY PHYSICIAN >1 H FROM KINGSTON %	NO FAMILY PHYSICIAN %
All respondents (n=122)	39	29	33
Female (n=58)	52	19	28
Male (n=62)	24	39	37
Married or common law (n=67)	57	18	26
Single (n=54)	15	43	43
Children (n=19)	74	11	16
No children (n=102)	31	32	36
Chronic illness (n=16)	75	13	13
No chronic illness (n=106)	33	31	36
Regular prescription medications (n=45)	60	9	31
No regular prescription medications (n=77)	26	40	34

All proportions have P *values that are significant at <.05.*

The reasons 75 residents gave for not having family physicians in Kingston (either no family physician or one outside Kingston) are shown in **Table 3**. The health behaviours of residents (more than one response was possible) showed 34% of residents had not seen a family physician in more than 2 years, 41% had written prescriptions for themselves or another

Table 3. Why residents did not have family physicians in Kingston: *n=75 residents.*

RESIDENTS' REASON	%
Do not need a physician	47
No time	41
No physician available	21
Confidentiality concerns	7
Other	16

colleague, and 47% had received prescriptions from either a resident or staff physician with whom they were working.

In response to scenario 1, “You are feeling rundown, feeling feverish, and coughing up green sputum. You suspect that you might have pneumonia. Where do you go for treatment?” 28% would see their own family physician, 23% would go to emergency department, 17% would obtain an antibiotic prescription from a resident, 13% would find a family physician, 7% would obtain an antibiotic prescription from a staff physician, 3% would prescribe antibiotics for themselves, and 8% would find alternatives (n=122 residents). Assuming that consulting their own family physicians, going to emergency, and finding a family physician in Kingston are appropriate actions, 64% responded appropriately and 27% chose inappropriate actions.

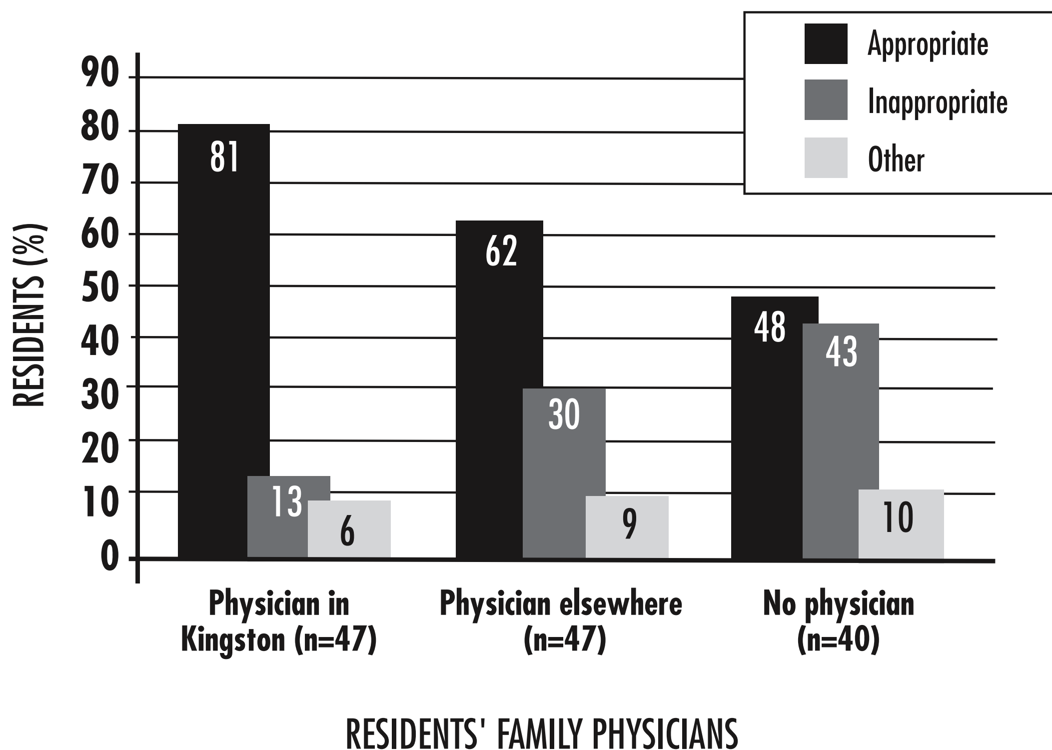
The categorized response to scenario 1 was significantly related to whether residents had family physicians (**Figure 1**). Residents with family physicians in Kingston were more likely to seek appropriate medical attention than were residents with family physicians out of town or residents with no family physician at all.

In response to scenario 2, “You have been down and stressed out for a while and it’s beginning to affect your work abilities and your close relationships. What would you do?” 22% of respondents chose appropriate responses (**Table 4**): seeking confidential, objective medical care; seeing their own family physicians;

Table 4. **How residents would react to the mental health problem presented in scenario 2:** *n=122 residents.*

WHAT RESIDENTS WOULD DO	%
Suffer through it	25
Confide in another resident	21
See my family physician	12
Find a family physician	7
Call the Ontario Medical Association’s crisis line	3
Don’t know	3
Can’t relate to this happening to me	3
Call crisis line	0
Go to emergency department	0
Other	25

Figure 1. **How residents responded to the personal medical problem in scenario 1**



finding a family physician in Kingston; and calling the Ontario Medical Association's crisis line. Inappropriate responses included ignoring the problem, suffering through it, not being able to relate to the situation happening to them, not knowing what they would do, and confiding in another resident. Thus 53% responded inappropriately to this situation. Whether residents had family physicians significantly affected residents' responses to scenario 2 (**Figure 2**).

DISCUSSION

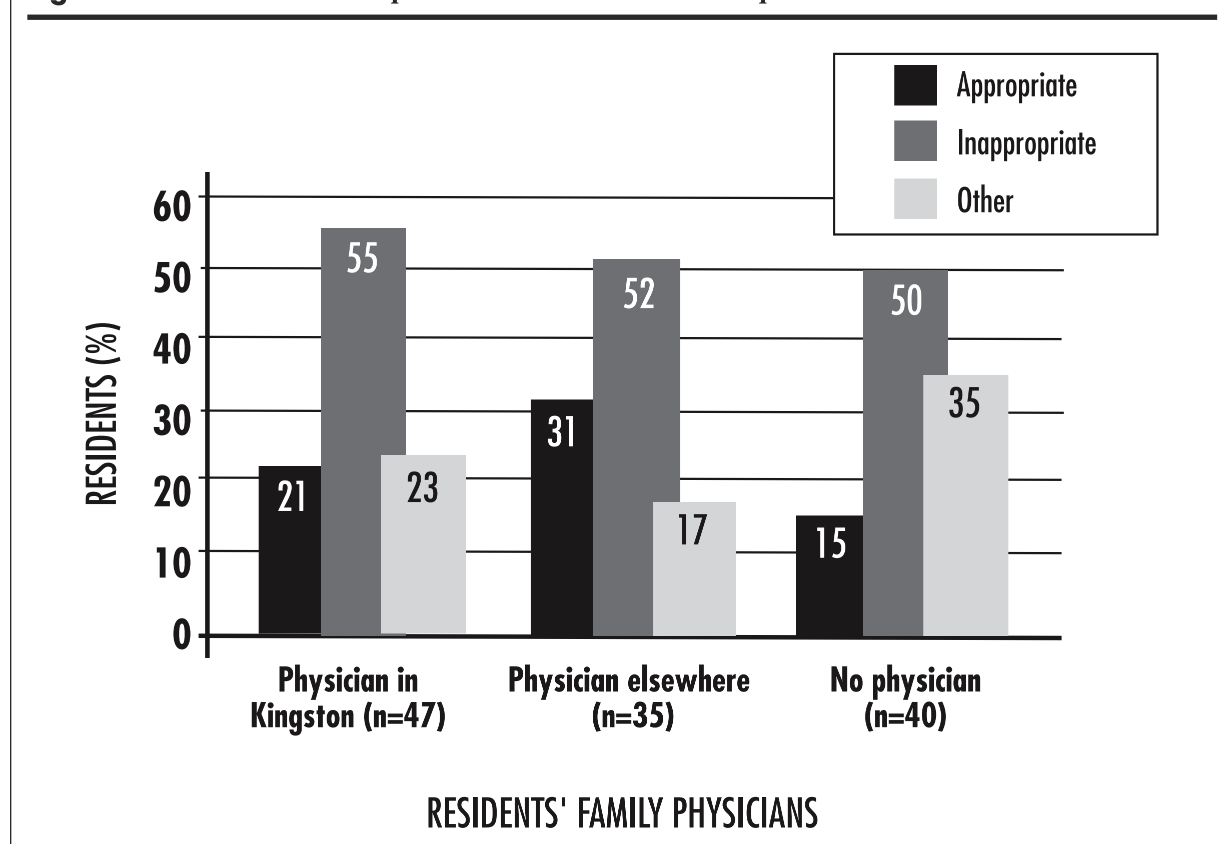
Despite recommendations by the CMA, CPSO, and PAIRO, most residents at Queen's University do not have local family physicians.[11-13] Some residents have family physicians elsewhere, but these physicians are mostly inaccessible. Most worrying are residents with chronic illnesses or needing regular prescription medications who do not have local family physicians. Single, male, childless residents are also vulnerable, as they do not seem to appreciate the need for a family physician.

More than one quarter of the residents would seek medical care from colleagues or treat themselves when presented with medical problems. Residents without family physicians were more than three times as likely to rely on themselves or their colleagues for medical treatment than those with local family physicians. Residents with local family physicians were more likely to seek appropriate care for medical problems than residents who had family physicians elsewhere.

Residents rely on their colleagues and themselves for medical treatment. We found that 41% of residents have written prescriptions for themselves or colleagues, and 47% have received prescriptions from colleagues. As 40% of the residents who use prescription medications regularly do not have local family physicians, this behaviour is unsurprising. These findings are similar to those of US residents and medical students.[7,14] Roberts and colleagues[24] found that this behaviour develops in medical school; the 11% of medical students who ask a colleague to write a prescription during their preclinical years rises to 28% during the clinical years.

The two most important barriers to accessing family physicians were not understanding the need for a personal family physician and lack of time to find or

Figure 2. How residents responded to the mental health problem in scenario 2



consult a family physician. The current shortage of family physicians and the ease of informal access to colleagues could contribute to the problem.[25] We did not find that confidentiality played as large a role it did in US studies of medical students.[21] We did not ask direct questions about substance abuse, which could increase concerns about confidentiality.

Residents, like medical students, are less likely to seek appropriate medical attention for mental health problems than for physical conditions.[21] The scenario designed to suggest symptoms of depression affecting work and personal relationships revealed that 25% of the residents would "suffer through it." The 21% who would confide in a colleague while recognizing a problem are at risk, as they might confide in a former resident who believes that "suffering through it" is the appropriate response.

Residents experience higher levels of stress than the general public, and high levels of stress are associated with psychological distress.[2,5] If residents are unable to recognize when they need help for mental health problems, this factor could contribute to the number of suicide attempts among residents and physicians. While the incidence of suicide in these groups is unknown, it is clear that untreated mental health problems are important risk factors for suicide as well as for the common problems of drug or alcohol dependency and personal relationship difficulties.[26] We have found that ignorance could be the main barrier to receiving appropriate attention for a mental health problem. Most residents indicated that objective, personal medical attention was not needed despite the effect of the situation on their personal relationships and ability to work. The CMA Policy Summary on physician health and well-being indicates that physicians have difficulty recognizing and seeking help for mental health problems.[11] As having a family physician did not significantly affect residents' response to this scenario, any initiative to improve residents' access to mental health services must first address their attitudes to personal mental health.

The percentage of residents at Queen's University without family physicians is more than twice that in the general population.[25] Our findings are similar to those of studies of personal health care among US internal medicine residents. Access to health care is unrelated to cost: all Canadian residents and more than 95% of US medical students and residents have health care insurance.[7,14,16]

Relying on oneself or colleagues for medical attention is prevalent among practising physicians.[17-19] Roberts and colleagues[21] in a large, multicentre study of medical students showed that 57% of students did not seek care, sometimes because of training demands and for 48% because of lack of access. In a similar longitudinal study of medical students at the University of New Mexico,[24] they found that students moving from preclinical to clinical training did not differ in their health care needs or access to care, although both groups were likely to ask colleagues for informal personal health care. Clinical students were more likely to ask colleagues to prescribe medication believing it took less time and protected their confidentiality. While it could be that access to student health services in university and the subsequent relocation of residents for training deters them from finding personal health care providers, the US findings suggest that ease of access to colleagues and the demands of training deter physicians from developing appropriate health care behaviour.

Limitations

The validity of our findings relies primarily on the accuracy of responses; generalizability depends on the true representativeness of our sample. We attempted to relieve anxiety about confidentiality by allowing omission of demographic data, yet concerns about confidentiality might have reduced participation or the accuracy of reporting. A social acceptability bias could lead to underestimation of inappropriate responses to the mental health scenario. This seems unlikely, as inappropriate responses far exceeded appropriate responses.

The response rate was lower for senior residents. If time is a barrier to participating in the survey, the results could underestimate the extent of the problem, as time is a barrier to finding a family physician.

Results cannot be generalized to all residents, as the climate and issues of finding a family physician could be unique to our setting. In addition, some residents were overlooked because they did not have mailboxes. Yet the results of US studies and the growing attention to physicians' health suggest that these issues are common and require attention. Further studies are needed to understand the complex factors that lead to the inappropriate health behaviours of our future health care providers. It seems to begin in medical school, to be reinforced during clinical training, and to be part of our medical culture.

Conclusion

Many residents, particularly single male residents in this study, did not have accessible family physicians. They sought inappropriate treatment for personal

physical problems and failed to recognize and treat mental health problems. Relocation, lack of time, and lack of understanding about the need for personal health care could lead to behaviours that can jeopardize the health of our future physicians. Further studies are needed to assess whether these results reflect the situation across Canada and to determine effective measures to improve physicians' health care practices.

Contributors

Dr Campbell *developed the survey and carried out the study.* **Drs Campbell** *and* **Delva** *modified the study, conducted the analysis, and prepared and revised the manuscript.*

Competing interests

None declared

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Editor's key points

- Residents at Queen's University were surveyed regarding their personal health practices.
- Thirteen percent had chronic illness, and 37% used prescription drugs. A third of residents had not seen a family physician for more than 2 years; 41% wrote prescriptions for themselves, and 47% received prescriptions from colleagues or other staff with whom they worked.
- No single, male resident had a family physician; married women and those with children were more likely to have one.
- Residents were less likely to seek help for mental health problems than for physical conditions.
- Barriers to accessing a family physician were not understanding the importance of having one and lack of time to find or consult one.

Points de repère du rédacteur

- Un sondage a été réalisé auprès de résidents de la Queen's University concernant leurs habitudes personnelles quant à la santé.
- Treize pour cent souffraient de maladie chronique et 37% utilisaient des médicaments d'ordonnance. Un tiers des résidents n'avaient pas consulté un médecin de famille depuis plus de deux ans; 41% rédigeaient des ordonnances pour eux-mêmes et 47% recevaient des prescriptions de collègues ou d'autres membres du personnel avec qui ils travaillent.
- Aucun résident célibataire de sexe masculin n'avait de médecin de famille; les femmes mariées et les médecins ayant des enfants étaient plus susceptibles d'en avoir un.
- Les résidents étaient moins enclins à rechercher de l'aide pour des problèmes de santé mentale que pour des problèmes physiques.
- Parmi les obstacles empêchant d'accéder à un médecin de famille figuraient le manque de compréhension de l'importance d'en avoir un et le manque de temps pour en trouver ou en consulter un.

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